

D1
C054. chemokine encoding region;
wherein said intracellular retention signal sequence and said chemokine encoding region are expressed from said promoter as a single intrakine transcript.

18. (Amended) The method of claim 17, further defined as comprising the steps of:

D2 obtaining a vector comprising a nucleic acid segment encoding a promoter; an intracellular retention signal sequence and a chemokine receptor binding polypeptide gene; and

transducing said vector into said cell;
wherein said vector expresses said intracellular retention signal sequence and chemokine receptor binding polypeptide coding region under the transcriptional control of said promoter to produce a fusion polypeptide when transduced into said cell.

19. (Amended) The method of claim 18, wherein said polypeptide is a chemokine, the chemokine analog RANTES(9-68), an antibody or a peptide.

D3 29. (Amended) The method of claim 24, wherein said cell is transduced with a CC-chemokine coding region fused to an endoplasmic reticulum (ER)-retention signal to intracellularly block the transport and surface expression of an endogenous CC receptor.

D4 35. (Amended) An expression vector for treatment of an HIV infection in a subject, wherein said expression vector includes:

an expression region which comprises:
a promoter;
an intracellular retention signal sequence encoding region; and
a chemokine encoding region;

wherein said intracellular retention signal sequence and said chemokine encoding region are expressed as a single intrakine transcript from said promoter; and

wherein when said expression vector is administered to lymphocytes, monocytes, macrophages or stem cells of said subject said cells exhibit a phenotypic knock out of an HIV co-receptor.

REMARKS

The present invention relates to methods and compositions for the treatment of HIV infection and methods for conferring HIV resistance to cells.

Claims 1-24, 29 and 33-39 are under consideration.

Claims 1, 18, 19, 29 and 35 have been amended herein. Support for these amendments is found throughout the specification as filed and as more fully set forth below. Therefore, no new matter has been added by way of these amendments.

Rejection of claims 1, 2, 5-16, 18-22, 29, 33-35 and 38 pursuant to the judicially created doctrine of obviousness-type double patenting

Claims 1, 2, 5-16, 18-22, 29, 33-35 and 38 stand provisionally rejected pursuant to the judicially created doctrine of obviousness-type double patenting, because in the view of the Examiner, they are unpatentable over claims 3, 6, 8-16, 18-20, 23, 26, 28-36, 38-42, 44-46 and 51 of co-pending application 09/332,275.

Applicants agree to file a Terminal Disclaimer in the co-pending application upon notice that claims 1, 2, 5-16, 18-22, 29, 33-35 and 38 in this application are allowable.

Rejection of claims 1-24, 29, and 33-39 pursuant to 35 U.S.C. § 112, first paragraph

Claims 1-24, 29, and 33-39 stand rejected pursuant to 35 U.S.C. § 112, first paragraph, because in the view of the Examiner, they are not described in the specification in such a way as to enable one of skill in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Examiner alleges that consideration of the factors described in *In re Wands* (8 USPQ2d 1400 (Fed. Cir. 1988)) indicate that the unpredictability in the area of gene therapy, lack of sufficient guidance and working examples